

02107576 CAPE FEAR RIVER AT NAVASSA, NC

LOCATION.--Lat 34°15'36", long 77°59'15", Brunswick County, Hydrologic Unit 03030005, at Seaboard Air Line Railroad bridge, .75 mi northeast of Navassa.

DRAINAGE AREA.--7,060 mi².

PERIOD OF RECORD.--Water years 1960 to 1967, 2003 to December 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1959 to September 1967, November 2003 to November 2004.

SALINITY: October 1959 to September 1967, November 2003 to November 2004.

pH: September 2003 to November 2004.

WATER TEMPERATURE: October 1959 to September 1967, September 2003 to November 2004.

DISSOLVED OXYGEN: November 2003 to November 2004.

DISSOLVED OXYGEN, PERCENT SATURATION: November 2003 to November 2004.

INSTRUMENTATION.--Water-quality monitor from September 2003 to December 2004.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water Supply Paper 2311. The dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm of Hg. A top and bottom sample was collected daily at high tide for specific conductance during the period 1959 to 1967.

EXTREMES FOR PERIOD OF DAILY RECORD.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	26,000, October 24, 1963 (daily, bottom)	40, February 22, 26, 1960 (daily)
SALINITY, ppt	15.9, October 24, 1963 (daily, bottom)	0.02, February 22, 26, 1960 (daily)
pH, standard units	7.7, November 27, 28, 2003	6.0, September 18, 19, 2004
WATER TEMPERATURE, °C	31.1, July 11, August 21, 25, 1966 (top)	1.1, December 6, 1965 (bottom)
DISSOLVED OXYGEN, mg/L	12.2, January 31, February 1, 2004	2.8, July 26, 27, 2004
DISSOLVED OXYGEN, PERCENT SATURATION,%	97, January 25, 2004	37, July 26, 27, 2004

EXTREMES FOR CURRENT PERIOD.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	21,300, November 11, 2004	74, September 4, 2004
SALINITY, ppt	12.8, November 11, 2004	0.03, on many days during the period
pH, standard units	7.7, November 27, 28, 2003	6.0, September 18, 19, 2004
WATER TEMPERATURE, °C	30.7, July 21, 2004	4.5, February 2, 2004
DISSOLVED OXYGEN, mg/L	12.2, January 31, February 1, 2004	2.8, July 26, 27, 2004
DISSOLVED OXYGEN, PERCENT SATURATION,%	97, January 25, 2004	37, July 26, 27, 2004

02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16,100	191	5,880	13,300	208	4,490	17,700	243	6,930	134	109	120
2	16,200	174	5,970	12,300	209	3,270	15,500	224	4,030	127	90	106
3	16,600	187	5,710	12,000	210	3,400	13,500	199	3,180	102	78	93
4	16,400	195	6,420	11,800	200	3,530	12,000	200	3,660	83	74	78
5	18,200	187	6,960	11,500	189	3,660	13,100	200	4,410	91	78	84
6	19,000	189	7,840	11,800	179	3,470	10,200	182	2,280	96	83	88
7	18,300	169	6,470	11,600	186	4,570	14,400	177	4,420	297	88	103
8	---	---	---	11,600	177	4,630	12,600	183	3,380	303	94	117
9	---	---	---	10,200	164	4,210	11,600	205	2,920	128	100	112
10	---	---	---	9,440	167	3,400	15,000	218	3,850	129	102	111
11	---	---	---	10,100	180	3,760	13,400	242	4,980	116	87	98
12	---	---	---	13,300	184	4,800	13,700	250	5,240	98	76	81
13	---	---	---	13,300	195	5,350	---	---	---	87	76	82
14	---	---	---	---	---	---	---	---	---	84	78	81
15	---	---	---	16,900	215	5,830	---	---	---	91	82	86
16	13,700	199	3,850	17,300	224	6,320	---	---	---	95	88	92
17	12,800	197	4,090	16,000	299	7,480	---	---	---	103	90	95
18	13,600	202	4,480	18,100	227	6,220	---	---	---	106	90	96
19	15,400	200	4,930	15,900	237	6,280	113	83	95	113	91	101
20	17,000	202	4,790	15,800	250	6,390	93	77	84	729	98	142
21	17,000	222	6,290	16,400	290	7,420	94	80	85	3,650	96	544
22	15,800	220	5,460	17,100	319	8,290	95	81	85	1,130	86	185
23	13,900	210	4,440	16,500	308	8,290	106	86	93	815	85	155
24	10,100	202	4,210	17,500	244	6,510	111	91	98	2,360	87	401
25	13,700	213	6,210	15,300	248	6,250	126	96	110	3,930	95	698
26	12,600	222	5,650	17,900	260	7,760	1,630	112	282	5,520	103	1,250
27	14,800	214	5,990	18,700	271	8,640	1,830	115	295	6,810	114	1,990
28	13,100	220	4,240	19,000	271	8,240	2,800	109	387	7,400	124	1,940
29	15,500	226	4,340	16,600	247	6,510	2,690	118	593	3,110	131	616
30	---	---	---	16,500	249	6,480	3,680	116	606	3,250	141	691
31	---	---	---	16,700	258	7,330	632	114	158	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	7,400	74	348

02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN									
1	9.4	0.08	3.3	7.6	0.08	2.5	10.4	0.1	3.9	0.05	0.04	0.05
2	9.5	0.07	3.4	7.0	0.08	1.8	9.0	0.09	2.2	0.05	0.04	0.04
3	9.7	0.07	3.2	6.8	0.09	1.8	7.8	0.08	1.7	0.04	0.03	0.04
4	9.6	0.08	3.6	6.7	0.08	1.9	6.8	0.08	2.0	0.03	0.03	0.03
5	10.7	0.07	3.9	6.5	0.08	2.0	7.5	0.08	2.4	0.04	0.03	0.03
6	11.3	0.08	4.5	6.7	0.07	1.9	5.7	0.07	1.2	0.04	0.03	0.04
7	10.8	0.07	3.7	6.6	0.07	2.5	8.3	0.07	2.4	0.1	0.04	0.04
8	---	---	---	6.6	0.07	2.6	7.2	0.07	1.8	0.1	0.04	0.05
9	---	---	---	5.7	0.07	2.3	6.6	0.08	1.6	0.05	0.04	0.04
10	---	---	---	5.3	0.07	1.8	8.7	0.09	2.1	0.05	0.04	0.04
11	---	---	---	5.7	0.07	2.0	7.7	0.1	2.7	0.05	0.03	0.04
12	---	---	---	7.6	0.07	2.6	7.9	0.1	2.9	0.04	0.03	0.03
13	---	---	---	7.6	0.08	3.0	---	---	---	0.03	0.03	0.03
14	---	---	---	---	---	---	---	---	---	0.03	0.03	0.03
15	---	---	---	9.9	0.09	3.3	---	---	---	0.04	0.03	0.03
16	7.9	0.08	2.1	10.2	0.09	3.5	---	---	---	0.04	0.04	0.04
17	7.3	0.08	2.2	9.3	0.1	4.2	---	---	---	0.04	0.04	0.04
18	7.8	0.08	2.5	10.7	0.09	3.5	---	---	---	0.04	0.04	0.04
19	9.0	0.08	2.7	9.3	0.10	3.5	0.05	0.03	0.04	0.05	0.04	0.04
20	10	0.08	2.6	9.2	0.1	3.6	0.04	0.03	0.03	0.3	0.04	0.06
21	10	0.09	3.5	9.6	0.1	4.2	0.04	0.03	0.03	1.9	0.04	0.3
22	9.2	0.09	3.0	10.0	0.1	4.7	0.04	0.03	0.03	0.5	0.03	0.08
23	8.0	0.09	2.4	9.6	0.1	4.7	0.04	0.03	0.04	0.4	0.03	0.07
24	5.7	0.08	2.3	10.3	0.1	3.6	0.04	0.04	0.04	1.2	0.03	0.2
25	7.9	0.09	3.5	8.9	0.1	3.5	0.05	0.04	0.04	2.1	0.04	0.3
26	7.2	0.09	3.1	10.5	0.1	4.4	0.8	0.04	0.1	3.0	0.04	0.6
27	8.6	0.09	3.3	11.1	0.1	4.9	0.9	0.05	0.1	3.7	0.05	1.0
28	7.5	0.09	2.3	11.3	0.1	4.7	1.4	0.04	0.2	4.1	0.05	1.0
29	9.0	0.09	2.4	9.7	0.1	3.7	1.4	0.05	0.3	1.6	0.05	0.3
30	---	---	---	9.6	0.1	3.6	1.9	0.05	0.3	1.7	0.06	0.3
31	---	---	---	9.8	0.1	4.2	0.3	0.05	0.07	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	4.1	0.03	0.2

02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN									
1	7.0	6.6	6.8	7.0	6.6	6.8	7.1	6.8	6.9	6.6	6.3	6.4
2	---	---	---	7.0	6.7	6.8	7.0	6.8	6.9	6.6	6.3	6.4
3	---	---	---	7.0	6.7	6.8	7.0	6.8	6.9	6.5	6.3	6.4
4	---	---	---	7.0	6.5	6.8	7.0	6.7	6.9	6.3	6.2	6.3
5	---	---	---	7.0	6.7	6.8	7.0	6.7	6.8	6.4	6.2	6.3
6	---	---	---	6.9	6.6	6.8	7.0	6.7	6.8	6.4	6.2	6.3
7	---	---	---	6.9	6.6	6.8	7.0	6.7	6.8	6.4	6.2	6.3
8	---	---	---	6.9	6.6	6.7	7.0	6.7	6.8	6.6	6.3	6.4
9	---	---	---	6.9	6.6	6.7	7.0	6.8	6.9	6.6	6.4	6.5
10	---	---	---	6.8	6.6	6.7	7.1	6.8	6.9	6.7	6.4	6.5
11	---	---	---	6.9	6.6	6.7	7.1	6.8	7.0	6.6	6.3	6.5
12	---	---	---	6.9	6.6	6.7	7.0	6.8	7.0	6.4	6.2	6.3
13	---	---	---	7.0	6.6	6.8	---	---	---	6.3	6.2	6.3
14	---	---	---	---	---	---	---	---	---	6.3	6.2	6.3
15	---	---	---	7.0	6.7	6.8	---	---	---	6.4	6.2	6.3
16	7.0	6.7	6.8	7.0	6.7	6.8	---	---	---	6.3	6.2	6.3
17	7.0	6.7	6.8	7.0	6.7	6.8	---	---	---	6.3	6.2	6.2
18	7.0	6.7	6.8	7.0	6.7	6.8	---	---	---	6.3	6.0	6.2
19	7.0	6.7	6.8	6.9	6.7	6.8	6.6	6.2	6.3	6.3	6.0	6.2
20	7.1	6.7	6.8	6.9	6.7	6.8	6.3	6.1	6.1	6.5	6.1	6.3
21	7.1	6.7	6.8	6.9	6.7	6.8	6.3	6.1	6.1	6.4	6.2	6.3
22	7.1	6.7	6.8	7.0	6.7	6.9	6.4	6.2	6.2	6.5	6.2	6.3
23	7.0	6.7	6.8	7.0	6.7	6.9	6.4	6.2	6.2	6.4	6.2	6.3
24	6.9	6.7	6.8	7.0	6.7	6.8	6.4	6.2	6.2	6.4	6.2	6.3
25	7.0	6.7	6.8	7.0	6.7	6.8	6.5	6.2	6.3	6.6	6.3	6.4
26	7.0	6.7	6.9	7.0	6.7	6.9	6.5	6.2	6.4	6.6	6.3	6.4
27	7.1	6.7	6.9	7.1	6.7	6.9	6.5	6.2	6.4	6.7	6.4	6.5
28	7.0	6.7	6.8	7.1	6.7	6.9	6.4	6.2	6.4	6.8	6.4	6.5
29	7.0	6.8	6.9	7.1	6.8	6.9	6.5	6.3	6.4	6.6	6.5	6.5
30	---	---	---	7.1	6.8	6.9	6.6	6.4	6.4	6.6	6.4	6.5
31	---	---	---	7.1	6.8	6.9	6.4	6.3	6.4	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	6.8	6.0	6.4

02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN									
1	28.4	27.1	27.8	28.8	28.2	28.6	29.8	29.1	29.4	26.8	26.3	26.5
2	28.4	27.3	27.8	28.6	28.2	28.5	30.1	29.1	29.5	26.5	25.6	26.0
3	28.7	27.4	27.9	28.7	27.9	28.2	29.8	29.0	29.3	25.6	24.7	25.2
4	28.1	27.4	27.8	29.0	27.9	28.3	30.1	28.7	29.2	25.4	24.6	24.8
5	28.4	27.2	27.8	29.5	28.1	28.6	30.0	29.0	29.3	25.6	24.7	24.9
6	28.1	27.3	27.8	29.8	28.4	28.9	29.2	28.4	28.8	24.9	24.7	24.8
7	28.7	27.3	27.9	30.0	28.6	29.2	28.6	27.8	28.3	24.9	24.7	24.8
8	---	---	---	29.6	28.9	29.2	28.4	27.7	28.1	25.4	24.7	24.9
9	---	---	---	29.7	28.8	29.2	28.4	27.7	28.0	25.8	24.9	25.3
10	---	---	---	30.1	28.9	29.4	28.7	27.7	28.0	25.9	25.6	25.7
11	---	---	---	30.1	29.2	29.5	28.2	27.8	28.0	25.7	24.9	25.4
12	---	---	---	29.5	29.1	29.4	28.0	27.6	27.8	24.9	24.2	24.5
13	---	---	---	29.9	29.1	29.4	---	---	---	24.6	24.2	24.3
14	---	---	---	---	---	---	---	---	---	24.2	23.8	24.0
15	---	---	---	30.2	29.6	29.9	---	---	---	24.1	23.7	23.9
16	28.3	27.8	28.0	30.2	29.7	30.0	---	---	---	24.2	24.0	24.1
17	28.0	27.6	27.9	30.2	29.4	29.8	---	---	---	24.6	24.1	24.4
18	28.6	27.7	28.0	30.1	29.1	29.5	---	---	---	24.4	24.0	24.2
19	29.3	28.0	28.4	30.3	28.9	29.4	25.0	23.9	24.2	24.0	23.2	23.7
20	28.7	28.0	28.4	30.4	29.1	29.5	25.1	24.1	24.5	23.2	22.7	23.0
21	28.9	27.7	28.2	30.7	29.2	29.7	25.8	24.8	25.1	23.0	22.3	22.7
22	29.0	27.9	28.4	30.0	29.3	29.7	25.8	25.2	25.4	23.0	22.1	22.5
23	29.5	28.2	28.7	30.1	29.3	29.7	26.3	25.5	25.7	22.9	22.0	22.3
24	29.1	28.4	28.8	30.1	29.3	29.7	26.4	25.5	25.8	22.7	21.9	22.2
25	29.5	28.5	29.0	29.8	29.2	29.6	26.6	25.6	25.9	22.9	22.0	22.3
26	29.2	28.5	28.9	30.2	29.2	29.7	26.2	25.8	26.0	22.8	22.2	22.4
27	29.1	28.5	28.8	30.1	29.5	29.8	26.5	25.9	26.1	23.6	22.3	22.8
28	29.2	28.5	28.9	29.8	29.2	29.6	26.6	25.8	26.1	23.9	22.9	23.3
29	29.1	28.6	28.8	29.5	29.0	29.3	26.6	26.0	26.2	24.0	23.1	23.4
30	---	---	---	29.7	29.0	29.3	26.6	26.0	26.3	24.1	23.4	23.7
31	---	---	---	29.9	29.1	29.4	26.6	26.2	26.4	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	26.8	21.9	24.1

CAPE FEAR RIVER BASIN

02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	JUNE			JULY			AUGUST			SEPTEMBER		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.0	4.4	4.6	5.0	4.0	4.5	4.2	3.5	3.9	5.6	3.7	4.4			
2	4.8	4.2	4.5	5.0	4.0	4.5	5.0	3.5	4.1	6.0	4.8	5.3			
3	4.8	4.0	4.3	5.0	4.0	4.5	5.6	3.6	4.7	5.3	4.5	4.9			
4	4.8	3.8	4.2	5.2	4.0	4.5	5.3	4.0	4.7	5.2	4.3	4.8			
5	4.8	3.9	4.3	5.0	4.0	4.6	4.9	3.8	4.5	5.3	4.4	4.8			
6	4.6	3.9	4.2	4.8	4.1	4.5	5.0	4.2	4.7	5.1	4.2	4.7			
7	4.6	3.8	4.1	4.6	4.0	4.4	4.9	4.1	4.5	5.0	4.1	4.5			
8	---	---	---	4.4	4.0	4.2	4.9	4.1	4.6	5.3	4.2	4.6			
9	---	---	---	4.3	3.7	4.0	5.2	4.2	4.7	4.5	3.9	4.3			
10	---	---	---	4.2	3.6	3.9	5.5	4.1	4.9	5.6	4.1	4.9			
11	---	---	---	4.4	3.7	4.1	5.1	4.1	4.7	6.0	4.7	5.4			
12	---	---	---	4.4	3.8	4.1	4.7	3.9	4.4	5.0	4.3	4.7			
13	---	---	---	4.2	3.7	4.0	---	---	---	4.7	4.1	4.5			
14	---	---	---	---	---	---	---	---	---	4.6	4.1	4.4			
15	---	---	---	4.0	3.4	3.6	---	---	---	4.6	3.9	4.2			
16	4.8	4.2	4.4	3.9	3.3	3.6	---	---	---	4.1	3.6	3.8			
17	4.6	4.2	4.3	4.1	3.5	3.7	---	---	---	4.2	3.4	3.7			
18	4.6	4.1	4.3	4.4	3.5	3.8	---	---	---	4.2	3.5	3.7			
19	4.6	3.9	4.2	4.1	3.3	3.7	5.5	4.4	4.8	4.7	3.6	4.0			
20	4.3	3.8	4.1	4.1	3.3	3.7	5.1	4.1	4.4	6.0	4.3	5.1			
21	4.4	3.8	4.0	4.0	3.2	3.6	5.4	4.0	4.6	6.4	5.0	5.6			
22	4.3	3.9	4.1	3.8	3.1	3.5	5.9	4.3	4.9	6.2	5.2	5.6			
23	4.5	3.9	4.2	3.8	3.2	3.5	5.0	3.8	4.2	6.4	5.2	5.7			
24	4.4	3.9	4.2	4.0	3.0	3.5	4.7	3.8	4.1	6.5	5.3	5.8			
25	4.7	3.8	4.2	3.9	3.0	3.4	5.2	4.1	4.4	6.3	5.3	5.8			
26	4.6	4.0	4.2	3.9	2.8	3.4	4.9	3.7	4.4	5.9	5.1	5.5			
27	4.5	3.9	4.1	3.9	2.8	3.3	4.8	3.6	4.3	5.6	4.9	5.3			
28	4.4	3.8	4.1	4.1	2.9	3.5	4.6	3.5	4.1	5.8	5.1	5.3			
29	4.6	3.8	4.1	4.2	3.3	3.8	5.3	3.5	4.1	5.3	4.7	5.1			
30	---	---	---	4.2	3.4	3.8	5.0	4.1	4.3	5.0	4.4	4.7			
31	---	---	---	4.2	3.4	3.8	4.3	3.7	4.0	---	---	---			
MONTH	---	---	---	---	---	---	---	---	---	6.5	3.4	4.8			

02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN									
1	64	56	59	65	52	58	56	46	51	70	46	55
2	61	54	57	65	52	59	66	46	54	76	60	66
3	61	51	55	64	51	58	74	47	62	65	55	60
4	61	49	54	67	51	59	69	53	62	80	52	58
5	61	50	55	65	52	60	64	50	59	65	53	59
6	59	50	54	64	53	59	65	55	61	62	52	57
7	59	49	53	61	52	57	63	53	59	61	50	54
8	---	---	---	58	52	55	63	53	59	65	51	55
9	---	---	---	57	48	52	67	54	61	55	48	52
10	---	---	---	56	47	52	71	53	62	69	50	61
11	---	---	---	59	49	54	65	53	60	74	57	66
12	---	---	---	58	50	54	60	50	56	60	52	57
13	---	---	---	56	48	53	---	---	---	56	49	54
14	---	---	---	---	---	---	---	---	---	55	49	52
15	---	---	---	53	45	48	---	---	---	55	47	50
16	64	55	58	52	44	48	---	---	---	49	43	46
17	61	54	56	54	46	49	---	---	---	51	41	45
18	62	53	57	59	46	50	---	---	---	50	42	45
19	61	52	55	54	43	49	67	54	58	56	43	48
20	58	50	53	54	43	49	62	50	54	70	50	59
21	59	48	53	54	42	48	66	49	57	74	58	65
22	58	51	54	50	41	46	72	54	60	72	60	65
23	60	52	55	51	42	46	63	47	52	74	60	66
24	58	53	55	53	40	46	58	46	51	75	62	67
25	65	52	56	51	40	45	64	51	55	72	62	66
26	63	54	56	52	37	44	62	46	55	68	59	64
27	61	51	55	52	37	44	59	45	54	65	57	62
28	60	51	55	54	38	46	57	44	51	69	60	63
29	61	51	55	55	43	50	66	44	51	62	56	60
30	---	---	---	55	44	50	63	51	54	59	52	55
31	---	---	---	56	44	50	54	46	50	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	80	41	58

